

MONTANA ENVIRONMENTAL QU......

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August 17, 1976

**MEMORANDUM** 

Environmental Quality Council

From: Steven J. Perlmutter

EQC STAFF REPORT ON PREVENTION OF SIGNIFICANT DETERIORATION Subject:

Please find attached my report on the state's activities related to the prevention of significant deterioration pursuant to the federal Clean Air Act. The general conclusion is that this process constitutes a major state action and should be accompanied by an environmental impact statement as required by Sec. 69-6504 of the Montana Environmental Policy Act.

Based on this conclusion, I have drafted an EQC resolution for your consideration at the August 27 meeting. (Appendix E, page 33.)

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RULES FOR PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY
BACKGROUND

Under the federal Clean Air Act (42 U.S.C. 1857 et seq.) Montana, along with all other states, adopted a State Implementation Plan (SIP) setting forth the state's strategies and procedures for control of pollution and maintenance of air quality. Montana's SIP is administered by the Air Quality Bureau of the Department of Health and Environmental Sciences. An essential strategy of the SIP is the enforcement of national ambient air quality standards.

One of the stated purposes of the Clean Air Act is "to protect and enhance the quality of the nation's air resources." As a result of a lawsuit filed by the Sierra Club against the Environmental Protection Agency in May, 1972, the federal district court for the District of Columbia found that the EPA had failed to develop procedures which would prevent the significant deterioration of air quality in areas where air quality is superior to the national standards. The EPA subsequently disapproved all SIPs to the extent that they failed to include such nondegradation procedures. In December, 1974, the EPA promulgated Rules for the Prevention of Significant Deterioration (PSD) of air quality. These rules have been incorporated into every state's SIP, and are administered by the EPA until the state assumes the responsibility for their implementation. Each state has the option either to accept responsibility for the administration of the federal rules or to adopt its own procedures as a revision in its SIP. Montana has chosen the latter course.

## THE FEDERAL REGULATIONS

The federal regulations, set out in Title 40, Part 52.21 of the Code of Federal Regulations, establish two sets of procedures: for the classification

of areas and for the review of new sources of air pollution.

## Area Reclassification

The federal nondegradation strategy is based on the notion that "significant" deterioration of air quality must be defined on a local basis. The regulations establish an area classification plan by which local areas can determine the amount of additional pollution over 1974 base levels which will be considered acceptable. (Only sulfur dioxide and particulates are dealt with.) Class I designation would impose strict limits on air pollution increments, and practically any change in existing air quality would be considered significant. A Class II designation allows somewhat larger increments in existing ambient pollution levels, and deterioration which would normally accompany moderate, well-planned growth would be acceptable. A Class III designation would allow present air quality to be degraded up to the national ambient air quality standards. Areas which are presently in excess of those standards are exempt from these rules and cannot receive a classification until air quality is brought into line with the national standards.

Initially, the entire nation has been designated Class II. It is up to the states to identify regions for which redesignation to Class I or III is desirable and to submit redesignation proposals to the EPA. States may develop their own procedures for redesignation of areas, but there are certain minimum procedural requirements which must be met. The state must hold at least one public hearing in the affected region, and adequate notice and opportunity to participate must be provided. Other states and Indian tribes which might be affected by a reclassification must be notified in advance of the hearing, and a written discussion of the reasons for reclassification must also be available.

The proposed redesignation must be based on the record of the state's hearing, and that record must reflect consideration of (1) anticipated growth

in the area, (2) social, environmental, and economic effects of the redesignation on the affected area and adjacent areas, and (3) impacts of the proposed redesignation on regional or national interests.

EPA's review of the state's redesignation proposal is primarily to assure procedural compliance, and to avoid "arbitrary and capricious" disregard of the relevant considerations mentioned above. The EPA will conduct its own balancing of those factors and substitute its own judgement for the state's only if the redesignation proposal has been protested by another state or by an Indian Governing Body.

## New Source Review

Once an area has received its classification, the allowable pollution increment levels are to be enforced by preconstruction review of new pollution sources. The new source review procedures apply to the source categories listed in the rules; primarily heavy industry, municipal incinerators, and power generation plants. All new sources in these categories are subject to these rules, regardless of the classification of the area in which the source is to be located.

No new source will be approved unless (1) it will meet emission limits equivalent to those achievable by application of the "best available control technology", and (2) the effect on ambient air quality of the new source, in conjunction with existing sources in the area, will not violate the allowable air quality increments in the area where the source will be located, or in any other area. The analysis of existing sources will include all new sources previously permitted under these rules, any reduction in emissions from existing sources which had contributed to baseline air pollution levels, and general growth of commercial, industrial, residential and other sources of emissions

which do not require permits under these rules, and which were not included in the 1974 baseline.

The regulations set forth procedural requirements for new source review, including public notice, opportunity to submit written comments, time limits, etc. Construction of the new source must commence within 18 months of approval.

#### DEPARTMENT OF HEALTH PROPOSED RULES

In February, 1975, a committee comprising representatives of industry, environmental organizations and other groups was formed to assist the Department of Health and Environmental Sciences in developing nondegradation rules.

The committee has met a number of times and has produced a set of proposed rules.

The Department's draft proposal generally follows the pattern established by the federal regulations. The new source review procedures are essentially the same as the federal procedures, except that pollution from "associated developments" will be included in projecting expected emissions from a new source.

The redesignation procedures depart from the federal plan in several respects. In the first place, the Department's proposal lowers the overall ceiling on allowable pollution, setting statewide ambient air quality standards at 75 percent of the analogous federal limits. The Department's proposal sets up the same three-class system with the difference that in Class III areas, pollution levels may be increased by only one-half of the difference between existing levels and the applicable ambient air quality standard (which, in turn, is 25 percent lower than the federal standard).

The redesignation procedures place most of the burden on the local proponents of a redesignation proposal. An "approvable petition to redesignate" must include a discussion of anticipated growth and social-environmental-economic

impacts of the proposed redesignation; proof that other states and Indian tribes were given opportunity to comment; proof that the petition was prominently advertised for 30 days before it was circulated; an environmental impact assessment; description of control strategies demonstrating best available control technology for new and existing sources; and verification that the petition has been signed by 15 percent of the eligible voters in the affected area. No local hearing is required.

After the approvable petition is submitted to the Department, written comments will be accepted for 120 days. The Department has 300 days to make a recommendation to the Board of Health. The Board will hold a public hearing at its regularly scheduled meeting next following receipt of the Department's recommendation, and will make its findings within 30 days of that meeting.

# DISCUSSION OF NONDEGRADATION AND THE DEPARTMENT'S PROPOSED RULES

There are many policy questions raised by the notion of prevention of significant deterioration (PSD), and many alternative approaches to these questions. In some cases, the Department's proposed rules present only one of many possible approaches. In other cases, the proposed rules completely fail to address important problems. The following discussion raises some of the more important issues which should receive more thorough consideration before the rule-making process goes any further.

# Allocation of Responsibilities

An initial question which might be asked is, "Who should have the responsibility for developing, adopting and implementing PSD rules?" There are strong arguments for assigning new source review responsibilities to the Air Quality Bureau of the Department of Health, and no compelling reasons not to. The Bureau already has source review responsibility under the Clean Air Act,

and it would require very few new procedures to conduct such reviews under the nondegradation rules.

The solution is not so simple, however, with respect to procedures for reclassification of areas. EPA comments accompanying the federal regulations point out that

area classifications do not necessarily imply current air quality or current land use patterns. Instead, classification should reflect the desired degree of change from current levels and patterns. (39 FR 42512)

The identification of desired future growth patterns involves a complex analysis of social, economic, and political as well as environmental factors. The decisions which must be made require a sensitivity to issues which go far beyond the monitoring of air quality and the regulation of emission control technology. Indeed, the federal regulations recognize the possibility that states might choose to allocate PSD responsibilities to a land use control agency rather than to an air pollution control agency. (40 CFR 52.21(f)) The possibility of devising an interagency approach to area reclassification procedures has not been seriously considered, and rules adopted unilaterally by the Department of Health preclude that option.

In addition to the problem of allocation of responsibilities among state agencies, there is also the question of state versus local control. A decision to reclassify an area may have significant impacts on the future growth and development of that area. Input from local citizens is essential, and the Department's proposed rules do provide the opportunity for local comment, but in the proposed scheme, the final decision is to be made by the Board of Health. It is not clear what provisions, if any, are to be made for review of a redesignation proposal by local governing bodies. The only mandatory local approval

is in the form of signatures of 15 percent of the population. Is that a reasonable figure? Does that impose too great a burden on the proponents of a redesignation petition? Are local interests adequately represented? Should there be a local veto over redesignation petitions? The Department's proposed rules suggest one set of answers to these questions, but many other answers are possible and should be explored.

## Redesignation Strategy: Case-by-Case or Comprehensive Planning

There are two possible approaches to setting up reclassification procedures: the "ad hoc" approach, which responds to specific requests by sources to locate in areas whose classification would not permit such siting; and the "comprehensive" approach, in which reclassification is viewed as a positive tool for guiding growth before it occurs. Both approaches have some validity. Both have certain costs. Clearly, each approach would have a different set of impacts on decision making in Montana.

The Department's proposed rules adopt the "ad hoc" approach to redesignation, at least with respect to Class III designations. Petitions for Class III designations are tied to specific new source permit applications. The rules state that Class III designations will not be approved unless all emission sources within a 60-mile radius of the proposed "Class III source" have installed best available control technology, and if construction of the proposed source is not commenced within five years, the Class III redesignation will be rescinded. These rules make no provision for localities which may wish to adopt Class III status as a general growth decision independent of any specific new source construction.

What are the effects on future growth and decision making of choosing the "ad hoc" over the "comprehensive" approach?

## Impacts on Growth and Development

It is not clear from a reading of the proposed rules what the actual, physical impacts on growth might be. In both the federal regulations and the Department's proposed rules, increment levels and ambient air quality standards are expressed in terms of so many micrograms of pollutant per cubic meter of air. What do these numbers mean to a layman considering whether to support a petition for redesignation of his county to Class I or Class III? What practical limits to future developments are imposed by either of these designations? While an analysis of existing baseline pollutant levels in a given region might more appropriately be done in conjunction with a specific redesignation petition, it does seem appropriate for the Department of Health to present some discussion now of the type and magnitude of growth and development which will be feasible under each of the three area classifications. The Department has made some efforts along these lines, predicting the compatibility of the Colstrip developments with the three classifications, but these efforts have been rudimentary at best, and a much more thorough discussion is called for.

The Department should provide some discussion of its motivation and reasoning in defining the "significance" of air quality deterioration. Why were the federal increment levels adopted? What would be the effect of adopting more stringent increment levels? How much large-scale development is desirable in a Class II region before the conscious choice must be made to go to Class III? What about eliminating the Class III category altogether? What is the feasibility and what would be the effects of establishing increment levels for pollutants other than sulfur dioxides and particulates? What about initially classifying the entire state Class I and allowing redesignation from that starting point?

What are the effects of the requirement that a new emission source may not violate allowable increment levels either in the area in which it is to be located, or in any other area? Should the rules require the establishment of "buffer zones" surrounding Class III areas so that stricter standards in adjacent regions will not be violated? What will happen when a community desires Class III status while a nearby community wants to be Class I? Will there be competition for air resources as each community attempts to delineate buffer zones to protect its own growth goals? Should the state provide some mechanism for resolving such conflicts of interests?

The rules as formulated create what is equivalent to "prior appropriation" of air rights, similar to the system which prevails for water rights. A ceiling is put on future deterioration of air quality. That ceiling varies from existing ambient levels to a greater or lesser degree, depending on the classification of the area. The first large development in a given area may use up most of the available pollution increment, precluding subsequent development in the same area. What effects on planning, growth and decision making will such a prior appropriation system have? Would another formulation of the rules (e.g., no development to be allowed more than a specified percentage of the available pollution increment) have different impacts on growth?

# Requirements for Reclassification

The decision to reclassify an area is a decision about the future growth and development of that area. It might be appropriate to require that the redesignation proposal be accompanied by some sort of planning document indicating the measures that will be taken in the area to assure that future growth will not violate allowable pollution increment levels. Such measures might include transportation controls, indirect source review, control of pollutants other than sulfur dioxide and particulates, creative use of buffer zones, or some other form

of land use planning. The proper mix of control strategies might be determined and implemented at the local level, or suggested by the Department.

The current proposed rules make no mention of any such strategy, other than imposition of best available control technology on emission sources. Perhaps the Air Quality Bureau feels uncomfortable requiring anything beyond emission control technology. This raises the question again: should other state agencies be involved in the reclassification process? Might not the Department of Community Affairs, for example, have a contribution to make in devising area strategies for maintaining air quality? Might Fish & Game or the Department of Natural Resources and Conservation not have valuable input? Might the Department of State Lands not be concerned with the possible effects of a Class I designation on strip mining activity? Shouldn't the rules more clearly define the role of these agencies in reviewing a redesignation petition?

# Basis of the Redesignation Decision

Perhaps the most glaring omission in the Department's proposed rules is the failure to indicate the basis for the Board of Health's decision. The federal regulations indicate that a reclassification decision should be based on considerations of anticipated growth, social, environmental, and economic impacts, and impacts on regional and national interests. The proposed rules require the proponents of a redesignation petition to provide a discussion of these things, but there is no indication of the kind of balancing which the Board will be required to perform. Will the Board automatically approve all petitions that are procedurally correct? Will decisions be based strictly on air control technology considerations? The rules do not make this clear. It is essential that the criteria and standards be set out in advance so that

proponents and opponents of redesignation proposals will know what issues to address.

The EPA has been working on a set of guidelines to aid states in making reclassification decisions. These guidelines have not yet been formally issued, but they do indicate the kinds of considerations which should be relevant:

- Is the decision to reclassify consistent with historic and/or projected growth, social, and economic characteristics of the area?
- 2. Is the decision consistent with not only air quality considerations but with other environmental concerns such as water supply, water quality, noise, and solid waste?
- 3. Are there any areas within the reclassification boundaries of special value that may require additional environmental protection?
- 4. What related plans and programs affecting growth, energy facility and industrial location, and environmental management exist or are proposed for the area? How will these programs be affected by the reclassification?
- 5. What, if any, harmful spill-over effects would be caused by the reclassification in adjacent areas and states?
- 6. What are the advantages and disadvantages, including any potential irreversible effects, of the reclassification in terms of social, environmental, and economic effects?
- 7. Has the state taken into account such national and regional concerns such as the need for agricultural land for food production, the preservation of recreational and wilderness areas, the preservation of historic areas, and the need to develop energy resources?
- 8. What alternatives exist to meet the desired objectives without reclassifying? What advantages and disadvantages do these alternatives offer?

(6 Environment Reporter 363)

The rules should indicate which, if any, of these factors will enter into the final decision; how they will be weighted and balanced; what appeals will be available and on what grounds; how protests from adjacent states or counties or Indian tribes will be handled. If the final decision is to be sensitive to these kinds of considerations, the question arises once again: should the Board of Health alone be responsible for the decision?

A related question arises with respect to the approval or denial of permit applications for individual emission sources. While the Air Quality Bureau is more clearly the appropriate agency to make such decisions, there may nevertheless be some question as to the basis for the decisions. In light of the Supreme Court's recent decision in the <a href="Beaver Creek">Beaver Creek</a> case, the Department may be required to consider a wide range of environmental factors in reviewing new source permit applications. Furthermore, if comprehensive control strategies have been adopted in conjunction with an area redesignation, the permit decision should be responsive to those strategies. The rules should set out the Department's approach to these questions.

# Relationship to Other State and Local Policies and Programs

Redesignation decisions may have great potential impact on a variety of existing state and local policies and programs: e.g., Section 208 basin planning under the Federal Water Pollution Control Act; existing Air Quality Maintenance Plans under the Clean Air Act; county planning and zoning decisions; outdoor park and recreation planning by the Fish & Game Department; review of long-range energy plans by the Department of Natural Resources & Conservation. Many of the specific impacts would be more appropriately considered in conjunction with individual redesignation proposals. It is hoped that the above discussion has made it clear, however, that many important questions of policy and direction

will be resolved one way or another by the nature of the rules that are adopted. A careful analysis of the interrelationships of policies and programs would be helpful in evaluating the Department's proposed rules.

## <u>Cost and Feasibility of Various Strategies</u>

This discussion has pointed out that a number of approaches are available to the Department (and to state government as a whole) in developing rules for prevention of significant deterioration of air quality. Each approach will involve its own set of costs and benefits in terms of resources needed for implementing the programs. What kinds of monitoring efforts would be required under each approach? What monitoring capabilities are available? What are the costs in equipment and personnel? Similar questions may be asked with respect to transportation controls, indirect source review, maintenance of buffer zones, dispute resolution, etc. This sort of cost estimate should accompany any proposal for rule-making on major programs.

#### EQC INVOLVEMENT

As the above discussion has indicated, there are a number of important questions raised by the Department of Health's proposed rules for prevention of significant deterioration of Air Quality. On April 2, 1976, the Environmental Quality Council sent a letter to Governor Judge expressing the Council's concern that these matters were not being adequately addressed by the Department, and recommending that the Montana Commission on Environmental Quality (MCEQ) be convened to consider an interagency approach to the non-degradation program. The Governor responded in a letter dated April 28, 1976. While he did not feel that the MCEQ was the proper forum, he did call a meeting of representatives from the Departments of Health, Natural Resources & Conservation, Fish & Game, State Lands, and Community Affairs, and from the offices

of the governor and lieutenant governor to discuss the issues. At this meeting held on May 19, the Air Quality Bureau representatives familiarized the others with the nondegradation issue and briefly described the Health Department's proposed rules. Some discussion was then held dealing with the need for an interagency approach.

This meeting was disappointing. It became quite clear from the comments of the various department representatives that executive agencies have not viewed MEPA as providing either authorization or direction to the agencies to coordinate and integrate their policies and programs. The opinion was expressed repeatedly that if coordination is desired, explicit directions from the legislature will be required. No agency was willing (or able) to adopt a new approach on its own initiative, and there was no direction from the governor to encourage agencies to do so.

#### THE NEED FOR AN EIS ON RULE MAKING

In light of the <u>Beaver Creek</u> decision, agency responsibilities are somewhat clearer than they were in May. The Supreme Court has held that the policy statements of MEPA are more than empty words, and they do (or should) affect the actions of government agencies.

It is hoped that the discussion thus far has made it clear that the decisions made by the state in developing a program for the prevention of significant deterioration of air quality will have important social, economic, and environmental consequences. It has not been the purpose of this discussion to provide answers for the difficult questions which exist, but to emphasize the need for public consideration of those questions before options are closed to the state's decision makers.

It should be pointed out that the state is at liberty to consider any number

of alternative approaches to nondegradation. The state has chosen to devise its own rules rather than simply adopting the federal regulations. As long as certain minimum standards are met, there is no preset form which the rules must assume. The development of such rules is therefore a major decision which will have significant impacts on the environment.

It is true that, under the Administrative Procedure Act, the public must be given the opportunity to submit written comments, and public hearings may be requested before rules are adopted. That approach does not guarantee, however, that the issues will be adequately aired. If the Department develops its proposed rules and then presents them to the public for discussion, the important decisions will already have been made before the public is even aware of the available alternatives. The public discussion will be channeled by the structure of the proposed rules: recommendations will be made to alter a section here, add a phrase there. How is the public to be made aware of alternative solutions to the problems discussed earlier, or that such problems exist? It is incumbent on the Department of Health (or whatever agency is responsible for the rules) to conduct a public discussion of these issues before rule making proposals are submitted to the Board for approval.

It is also true that EISs will, of necessity, be prepared in conjunction with individual proposals for area reclassifications and for new source permit applications. By the time those actions are taken, however, it will be too late for decision makers to consider the issues which have been raised here. Once these rules are adopted, it will no longer be feasible for the Air Quality Bureau or the Board of Health or anyone else to consider the proper allocation of responsibility among state agencies, or the nature of the balance between state and local control, or the factors on which a final decision should be

based and how those factors are to be weighted. If the experience of the Department of Health in the <u>Beaver Creek</u> litigation has taught the government anything, it should be that those policy decisions should be made <u>at the inception of the program</u> (i.e., during the development of the rules which will govern the conduct of the program) rather than on a case-by-case basis later on. It is time for the government to open up its planning processes to public review, and allow MEPA and the EIS procedure to perform the functions for which they were designed.

An EIS on the proposed rules need not be a detailed description of environmental amenities and physical characteristics. It should be more in the nature of a policy option document, describing the different types of impacts and options which will result from different policy choices. An EIS on a specific redesignation proposal or on a new source permit application might discuss the specific impacts of the project on an area's growth, recreational opportunities, jobs, water quality, etc. In contrast, an EIS on these rules will discuss which of those factors are to be considered in decision making, how they are to be balanced against one another, and by whom. If such policy issues are thoroughly explored during the rule making process, subsequent EISs on specific projects will have a well-defined policy framework to relate to; the requirements for an adequate project-specific EIS will be more clearly discernable, and litigation challenging the adequacy of future EISs will be less likely.

One further question should be discussed at this point, as it may arise later: Do the Department of Health and other state agencies which might become involved in this process have the legal authority to implement some of the approaches discussed above? Are there not questions of policy which should

be made by the Legislature rather than by Executive agencies?

Such questions have no simple answers, but it would appear that sufficient statutory authorization already exists. The Montana Clean Air Act gives the Department of Health broad powers for protection of the state's air resources. Further, MEPA directs the Department (and also other state agencies) to "improve and coordinate" planning and program formulation in order to achieve environmental goals. Further authorization from the Legislature should not be needed, if the Executive Branch chooses to act.

Even the lack of sufficient statutory authority, however, would in no way diminish the need for an EIS to accompany rule making. In addition to calling for policy coordination, MEPA directs agencies to consider and present for public discussion the expected environmental consequences of their major policy decisions and to explore promising alternatives which would accomplish the desired objectives. The consideration of such alternatives need not be limited to those available to the Executive Branch of government. If indeed some of the problems relating to prevention of deterioration of air quality could be dealt with more effectively by legislation than by rule making, the EIS should explore that possible alternative. The EIS might then aid in subsequent efforts to formulate legislative proposals.

#### CONCLUSION

The requirement, imposed by federal regulations, that Montana develop procedures for the prevention of significant deterioration of air quality presents us with a promising opportunity for creative application of MEPA to the formulation of state policy. Too often in the past, agencies have paid

lip service to MEPA <u>after</u> the important decisions were made, or without regard to the coordination of policy with other agencies of government. The adoption of nondegradation rules is a clear example of decision making which will have significant environmental impacts and which requires the fullest possible public participation. In light of <u>Beaver Creek</u> state agencies should no longer be allowed to neglect their responsibilities in policy formulation. The Environmental Quality Council should strongly recommend the preparation of an environmental impact statement on the proposed nondegradation rules.

Draft of Proposed Rules Prepared by Air Quality Bureau (DHES)

PREVENTION OF SIGNIFICANT AIR QUALITY DETERIORATION

MAR 2 9 1976

#### (1)Definitions.

- "Administrator" means administrator of the Environmental Sciences Division of the Department of Health and Environmental Sciences (except where administrator has been specifically designated to mean the administrator of the U.S. Environmental Protection Agency).
- "Applicable ambient air quality standard" means the most stringent federal (b) or state ambient air quality standard for the corresponding time period.
- "Approved modeling procedures" means the use of dispersion equations and (c) procedures recommended by Bruce Turner in his publication Workbook of Atmospheric Dispersion Estimates, U.S. Department of Health, Education, and Welfare, 1969. Also, the use of plume rise equations described by G. A. Briggs in his publication Plume Rise, U.S. Atomic Energy Commission, 1969, and/or modifications accounting for multiple plume rise enhancement as described by G. A. Briggs in his publication Plume Rise From Multiple Sources, Environmental Research Laboratories, Oakridge, Tennessee, 1974, shall be accepted. Where terrain, climate or source configuration cause changes in the dispersion conditions covered in Turner's or Brigg's publications, the use of alternate dispersion equations and/or methods of calculating concentration estimates approved by the department shall be used.
- "Associated development" means that development directly attributable to (d) the increase in population or activity caused by the construction and operation of the proposed facility. This shall include, as a minimum, emissions due to increased vehicle traffic; increased residential and commercial heating units; and all additional sources and/or modifications to existing sources, predicted to develop due to the construction and operation of the proposed facility, that are capable of emitting an increase -19of 10 tons per year controlled emissions.

- (e) "Best available control technology" (as applied to any facility subject to this rule) means any emission control device or technique which is capable of reducing or eliminating emissions to an equivalent or higher degree than levels proposed or promulgated pursuant to applicable state or federal rules. Where no standard of performance has been proposed or promulgated for a source or portion thereof, or where the consideration of technical practicability and economic reasonableness indicate a greater reduction of emission may be capable, best available control technology shall be determined on a case by case basis considering the following:
  - (i) the process, fuels, and raw material available and to be employedin the facility involved;
  - (ii) the engineering aspects of the application of various types of control techniques which have been adequately demonstrated;
  - (iii) process and fuel changes;
  - (iv) the respective costs of the application of all such control techniques, process changes, alternative fuels, etc.;
  - (v) any applicable federal, state and local emission limitations; and
  - (vi) locational and siting considerations.
- (f) "Board" means the Board of Health and Environmental Sciences.
- (g) "Commence construction" means the date that a construction and/or operation permit is granted by the department pursuant to Section 69-3911, R.C.M. 1947.
- (h) "Construction" means fabrication, erection, or installation of an affected facility.
- (i) "Department" means the Department of Health and Environmental Sciences.
- (j) "Existing ambient air quality levels" refers to the sum of ambient concentration levels existing during 1974 corresponding to the time period of the applicable ambient air standard and those additional concentrations estimated to result from sources granted approval (pursuant to approved new source review procedures in the plan) for construction or modification

but not yet operating prior to January 1, 1975, and all associated development. (These concentrations shall be established for all time periods covered by this rule and may be measured or estimated. In the case of the maximum three-hour and twenty-four hour concentrations, only the second highest concentrations representative of the area shall be considered. In the event that no air quality measurements are available for an area, the department may require one year of background air quality monitoring).

- (k) "Federal land manager" means the head, or his designated representative, of any department or agency of the federal government which administers federally-owned land, including public domain lands within or adjacent to any area proposed for redeisgnation.
- (1) "Indian governing body" means the governing body of any tribe, band, confederation, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing powers of self-government.
- (m) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order or act of Congress.
- (n) "Modification" or "modified source" means any physical change in, or change in the method of operation of, a stationary source which increases the emission rate of any pollutant for which a state or national standard has been promulgated or which results in the emission of any such pollutant not previously emitted, except that:
  - (i) routine maintenance, repair, and replacement shall not be considered a physical change; and
  - (ii) the following shall not be considered a change in the method of operation:
    - (aa) an increase in the production rate, if such increase does not exceed the operating design capacity of the source; and
    - (bb) an increase in the hours of operation.

- (o) "Person" includes any individual, group, firm, partnership, corporation, cooperative, association, government subdivision, government agency, local government or other organization.
- (2) No person or persons shall cause, suffer, allow, or permit significant deterioration of air quality by the operation, construction, modification, or use of any machine, equipment, device or facility capable of becoming, directly or indirectly, a source of air pollution.
- (3) Particulate matter. Significant deterioration will be deemed to have occurred when existing ambient air quality levels of particulate matter are expected or predicted by approved modeling procedures:

#### (a) Annual

- (i) to be increased by 5 ug/m<sup>3</sup> annual geometric mean for areas designated
   Class I;
- (ii) to be increased by 10 ug/m³ annual geometric mean for areas designated Class II; or
- (iii) to be increased by one-half the difference between existing ambient air particulate matter levels and the applicable ambient air quality standard for areas designated as Class III; or

#### (b) 24-Hour

- (i) to be increased by 10  $ug/m^3$  24-hour maximum for areas designated Class I;
- (ii) to be increased by 30 ug/m<sup>3</sup> 24-hour maximum for areas designated Class II;
- (iii) to be increased by one-half the difference between existing ambient air particulate matter levels and the applicable ambient air quality standard for areas designated as Class III.
- (4) Sulfur dioxide. Significant deterioration will be deemed to have occurred when existing ambient air quality levels of sulfur dioxide are expected or predicted by approved modeling procedures:

#### (a) Annual

- to be increased by 2 ug/m<sup>3</sup> annual arithmetic mean for areas designated Class I;
- (ii) to be increased by 15 ug/m<sup>3</sup> annual arithmetic mean for areas designated Class II; or
- (iii) to be increased by one-half the difference between existing ambient air levels of sulfur dioxide and the applicable ambient air quality standard for areas designated as Class III; or

#### (b) 24-Hour

- (i) to be increased by 5  $ug/m^3$  24-hour maximum for areas designated Class I;
- (ii) to be increased by 100 ug/m<sup>3</sup> 24-hour maximum for areas designated Class II;
- (iii) to be increased by one-half the difference between existing ambient air levels of sulfur dioxide and the applicable ambient air quality standard for areas designated as Class III.

#### (c) Three Hour

- (i) to be increased by 25  $ug/m^3$  three-hour maximum for areas designated . as Class I;
- (ii) to be increased by 700 ug/m<sup>3</sup> three-hour maximum for areas designated as Class II;
- (iii) to be increased by one-half of the difference between existing ambient air levels of sulfur dioxide and the applicable ambient air quality standard (three-hour maximum) for areas designated as Class III.
- this rule shall not exceed 75 percent of the applicable ambient air quality standard. Areas exceeding this level shall be allowed air quality increments eugal to those of Class I. No redesignation to another class may occur until air quality levels are improved to a point below the allowable ceiling.

- (6) All portions of the state are designated as Class II for purposes of this rule, and any determination for redesignation may be made by the board only after submittal to and review by the department of an approvable petition to redesignate. The department may in the case of national parks, national wilderness areas or other areas of significant statewide interest recommend to the board redesignation to Class I.
- (7) Approvable petition to redesignate. A petition for redesignation shall only be reviewed by the department if it contains:
  - (a) Verification by a person in the state;
  - (b) An adequate and complete discussion of the reasons for proposed redesignation;
    - (c) An adequate and complete discussion of anticipated growth in the proposed area; the social, environmental, and economic impacts of such redesignation;
    - (d) Proof that adequate opportunity has been given for comments upon the proposed redesignation by other states, affected federal agencies, Indian governing bodies, and interested private and public bodies for individuals;
    - (e) Proof of advertisement of the petition for proposed redesignation in a newspaper or newspapers of general circulation in the area of the proposed redesignation at least thirty (30) days prior to circulation of the petition;
    - (f) A definition and description of the boundary of the area proposed to be included in the redesignation. The proposed boundary lines for the area proposed to be redesignated shall be submitted, in addition to the department, to officials of government agencies having jurisdiction over land, facilities, or personnel in the proposed area of redesignation, including, but not limited to, state and local air pollution control agencies, the chief executive of any city, town or county within the area, any comprehensive local or regional land use planning agencies, and any state or federal land manager and Indian governing body including appropriate tribal councils where lands would be affected by the redesignation;
  - (g) Verification that the petition contained the full text of the proposal

and was signed by at least fifteen (15) percent of the qualified electors in the area to be affected by redesignation who favor the proposal.

- (i) if an area is proposed for redesignation and does not encompass an entire county, the entire county nevertheless shall be deemed to be the affected area for purposes of the petition.
- (ii) Any other county less than sixty (60) miles from a proposed development, emitting one hundred tons or more of air pollutants annually and for which there are state or federal standards, shall be deemed to be part of the affected area for purposes of the petition.
- (h) If the proposed development for Class III designation does not result in actual ground breaking for construction or modification of the machine, equipment, device, or facility within five (5) years from the date of approval of the petition by the board, the Class III designation shall automatically be rescinded and the previous designation shall prevail.
- (i) An adequate and acceptable environmental impact assessment must accompany any petition for redesignation.
- (j) No petition for redesignation shall be considered unless an air pollution control strategy demonstrating best available control technology for any new, existing, or modified source has been filed with the department.

  Actual designation to Class III can take place only when all existing sources within sixty (60) miles of the source requiring Class III parameters have air pollution control strategies approved by the department as using best available control technology.
- (k) Any written comments on the proposed redesignation submitted to the petitioner within one hundred twenty (120) days after the petition has been received by the department shall be forwarded to the department for public inspection along with any response by the petitioner to any inquiries or comments submitted to the petitioner.

- (8) Department action.
  - (a) Within ten (10) business days after an approvable petition to redesignate has been received, the department shall issue a public notice in a newspaper or newspapers of general circulation in the area proposed for redesignation soliciting comments on the proposal. After one hundred twenty (120) days from receipt of the approvable petition to redesignate, no further public comments shall be accepted. However, the department may extend the period for receiving comments for parties whose initial comments have required additional amplification, and the department has requested such amplification.
  - (b) Upon receipt by the department of an approvable petition to redesignate, other states which may be affected by the proposed redesignation shall be notified by the department at least thirty (30) days prior to the public hearing before the board (as provided in paragraph (9)(a), infra).
  - (c) Within three hundred (300) days from receipt of an approvable petition to redesignate, the department shall make its recommendation to the board.

#### (9) Board action.

- (a) The board shall hold a public hearing at their meeting following the next regularly scheduled meeting to hear any further comments on the proposed redesignation.
- (b) The board shall make its determination on the proposed redesignation within thirty (30) days following their designated meeting.
- (c) If the board recommends against the proposed redesignation, the board shall issue Findings of Fact and Conclusions, and said Findings of Fact and Conclusions may be appealed by petitioners to the District Court of the county in which proposed redesignation is sought.
- (d) The board shall deliver its findings to the department for transmittal to the administrator of the U.S. Environmental Protection Agency.
- (10) This rule shall apply to any new or modified stationary source for which an increase of one hundred tons or more per year of one pollutant controlled

emissions for the full facility shall be emitted or to any source covered in the Federal Register of December 5, 1974, Volume 39, No. 235, Part 3, "Air Quality Implementation Plans" (Prevention of Significant Air Quality Deterioration).

- (11) No owner or operator of a potential source of pollution shall commence construction or modification of a source subject to this rule unless the administrator determines that, on the basis of information submitted pursuant to paragraph (12), infra:
  - (a) The effect on air quality concentration of the source or modified source and associated developments, in conjunction with the effect of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in that area or any other areas or any state or federal ambient air quality standard in these areas. The analysis of emissions growth and reduction after January 1, 1975, or other sources in the areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this rule and pursuant to Section 69-3911, R.C.M. 1947; reduction in emissions from existing sources which contributed to the baseline air quality; and general, commercial, residential, industrial, and other sources of emissions growth not included in the definition of baseline air quality which has occurred since January 1, 1975.
  - (b) The new or modified source will meet an emission limit, to be specified by the administrator as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology.
  - (c) With respect to modified sources, the requirement of sub-paragraph (ii) of this paragraph shall be applicable only to the facility or facilities from which emissions are increased.

- administrator shall, as a minimum, require the owner or operator of the source subject to this rule to submit: site information, plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification and associated developments will have on air quality levels; and any other information necessary to determine that best available control technology will be applied.

  Upon request of the administrator, the owner or operator of the source shall also provide information on the nature and extent of general commercial, residential, industrial, and other growth which has occurred in the area affected by the sources' emissions (such area to be specified by the administrator) from the effective date of this rule.
- (13) The board, in adopting this rule, does not intend to preclude the probability of adding, from time to time, incremental limitations for pollutants other than particulate matter and sulfur dioxide. As evidence becomes more available on the deleterious effects of other contaminants, and as monitoring techniques improve, this rule will be revised and additional limitations for such other pollutants will be established.





# MONTANA ENVIRONMENTAL QUALITY COUNCIL CAPITOL STATION

### HELENA, MONTANA 59601 JOHN W. REUSS, EXECUTIVE DIRECTOR

GOV. THOMAS L. JUDGE (OR DESIGNATED REPRESENTATIVE) G. STEVEN BROWN HOUSE MEMBERS
THOMAS O. HAGER, CHAIRMAN
WILLIAM M. DAY
GRAY N. KIMBLE
A. T. RASMUSSEN

SENATE MEMBERS
LARRY M ABER
TERRY MURPHY
ED B. SMITH
MARGARET S. WARDEN

APPOINTED MEMBERS G. W. DESCHAMPS CHARLES DOHENY HARRIET MARBLE JACK D. REHBERG

April 2, 1976

The Honorable Thomas L. Judge Governor State of Montana State Capitol Helena, Montana 59601

Dear Governor Judge:

The Montana Environmental Quality Council has reviewed the proposed rules being drafted by the Department of Health and Environmental Sciences for "Prevention of Significant Air Quality Deterioration." We are concerned that the Department's rules do not address the full range of impacts and policy alternatives which are involved in the "non-degradation" concept.

This is in no way a criticism of the Department of Health's efforts in devising rules. The Department's proposals with respect to air pollutant levels and new source performance standards are commendable. However, the non-degradation policy, which the State of Montana is required to adopt under federal regulations, involves questions of policy which go beyond the competency of the Department or Board of Health to decide.

The decision to redesignate a region from Class II to Class I or Class III is more than a regulation of ambient air quality, and must be more than a reaction to a specific proposal for construction of a potential source of air pollution. It must involve a broader-based decision making procedure than the Board of Health can provide on its own. A redesignation decision is, in essence, a comprehensive land use decision which sets effective limits to growth in the affected area. A decision of this magnitude requires careful consideration of social, economic, and political factors in addition to the technical air quality data on which the Board of Health is qualified to base its actions. Attention should also be paid to the allocation of responsibility to local levels of government in making these crucial decisions which will have direct impact on the future of local communities.

In summary, while the proposed rules of the Department of Health and Environmental Sciences may be satisfactory within the scope of the Department's jurisdiction and expertise, the Environmental Quality Council feels that a

The Honorable Thomas L. Judge April 2, 1976 page two

more broadly-based, multi-agency approach to the non-degradation process is required. The EQC recommends that the Governor's Commission on Environmental Quality, with the additional participation of the Department of Community Affairs, be convened to deal with this matter. The EQC staff will of course be available to provide assistance and input.

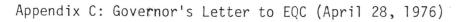
We hope that you will give this problem your immediate and serious attention.

Sincerely,

SENATOR MARGARET S. WARDEN Vice Chairman

#### MSW/mb

cc: Department of Community Affairs Department of Health and Environmental Sciences Department of Fish and Game Department of Natural Resources and Conservation Department of State Lands





State of Montana Office of Che Governor Helena 59601

THOMAS L. JUDGE

April 28, 1976

Honorable Margaret Warden Montana State Senator 280 3rd Ave. N. Great Falls, Montana 59401

Dear Margaret:

Thank you for your letter concerning the rules for "Prevention of Significant Air Quality Deterioration" being proposed by the Department of Health and Environmental Sciences. I appreciate your concern for the proposed rules and their ultimate impact.

In creating the Montana Commission on Environmental Quality I limited its authority to a consideration of uniform rules implementing the Montana Environmental Policy Act and any subsequent need for the revision of those rules. Therefore I do not believe that the M.C.E.Q. has the authority to consider the proposed rules you have referred to.

I do, however, agree that the proposed rules should be discussed in a forum consisting of the agencies you have mentioned. I suggest that a meeting consisting of representatives of the five departments involved, the Environmental Quality Council and my office be held to discuss the proposal rules and their impact. This meeting could serve as a briefing by the Department of Health and Environmental Sciences as well as an opportunity for comments by the other agencies and the EQC on the proposed rules.

I shall look forward to your response to this suggestion and will proceed accordingly.

Sincerely,

THOMAS L. JUDGE Governor

Appendix D: EQC Letter to Governor (May 6, 1976)

The Big Sky Country



# MIDNICANA STATE SENATE

SEN. MARGARET S. WARDEN DISTRICT NO. 18

HOME ADDRESS: 203 THIRD AVENUE NORTH GREAT FALLS, MONTANA 59401

HELENA ADDRESS: CAPITOL POST OFFICE HELENA, MONTANA 59501 COMMITTEES:
BILLS AND JOURNAL, V. CHAIRMAN
EDUCATION
JUDICIARY

S. ...

May 6, 1976

Honorable Thomas L. Judge Governor State Capitol Helena, Montana 59601

Dear Governor Judge:

Thank you for your letter of April 28 in which you respond to the Environmental Quality Council's concern with the Department of Health and Environmental Sciences' draft of proposed rules for "Prevention of Significant Air Quality Deterioration."

Your recommendation calling for a meeting of representatives from your office and the Department of Community Affairs, Natural Resources, Fish and Game, State Lands, and the Environmental Quality Council to review the proposed rules with representatives of the Department of Health and Environmental Sciences is acceptable to the Council. I hope such a meeting can be held soon.

I concur with you that the Executive Order establishing the Montana Commission on Environmental Quality limited its authority to preparing uniform rules for state agency preparation of environmental impact statements as required by the Montana Environmental Policy Act. In part, the Council's recommendation that the MCEQ be convened to review DHES's activities with respect to significant deterioration was based on the Council's feeling that many of the actions taken by individual state agencies have implications that cut across areas of concern of other state agencies and MCEQ was a logical mechanism for fostering better communication and coordination for issues relating to the environment. We would urge you to consider expanding the authority of MCEQ so it could operate in areas requiring a multi-agency approach to environmental matters.

Sincerely,

MARGARET S. WARDEN Vice Chairman Montana Environmental Quality Council

MSW/mb

#### Appendix E

#### DRAFT EQC RESOLUTION

WHEREAS, the State of Montana has the responsibility under the federal Clean Air Act to develop procedures for the prevention of significant deterioration of air quality, and

WHEREAS, the Department of Health and Environmental Sciences has been delegated the responsibility to propose rules to govern those procedures, and

WHEREAS, the formulation of those rules constitutues a major state action which might significantly affect the quality of the human environment.

NOW, THEREFORE, BE IT RESOLVED BY THE ENVIRONMENTAL QUALITY COUNCIL:

That an environmental impact statement on the proposed rules for the prevention of significant deterioration of air quality be prepared and circulated by the Department of Health and Environmental Sciences as required by Section 69-6504 of the Montana Environmental Policy Act; and

That such environmental impact statement discuss, at a minimum:

- 1. the allocation of responsibility among state agencies for the reclassification of areas of the state;
- 2. the allocation of responsibility between state and local authorities for the classification of areas of the state;
- 3. the "ad hoc" and "comprehensive" approaches to area reclassification, and the effects of each approach;
- 4. the impacts on growth and development of the proposed rules or alternatives, including:
  - a. the type and degree of growth compatible with different pollution increment levels;
  - b. the need for and effect of "buffer zones";
  - c. the effect of "prior appropriation" of air rights
- 5. the need to establish strategies such as transporation controls or indirect source review, and whether such strategies should be required in areas seeking reclassification;
- 6. the factors which will be considered by the state decision makers in reviewing redesignation petitions, and the manner in which those factors will be weighted and balanced;
- 7. the relationship of the proposed rules to other state and local policies and programs;